

**UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

LIONRA TECHNOLOGIES LTD.,

v.

FORTINET, INC.,

Case No. 2:22-cv-00322-JRG-RSP

(Lead Case)

**JURY TRIAL DEMANDED**

LIONRA TECHNOLOGIES LTD.,

v.

CISCO SYSTEMS, INC.,

Case No. 2:22-cv-00305-JRG-RSP

(Member Case)

LIONRA TECHNOLOGIES LTD.,

v.

HEWLETT PACKARD ENTERPRISE  
COMPANY, et al,

Case No. 2:22-cv-00319-JRG-RSP

(Member Case)

LIONRA TECHNOLOGIES LTD.,

v.

PALO ALTO NETWORKS, INC.,

Case No. 2:22-cv-00334-JRG-RSP

(Member Case)

**PLAINTIFF'S SUR-REPLY TO CISCO SYSTEMS, INC.'S RULE 12(b)(6)**  
**MOTION TO DISMISS FOR INELIGIBILITY OF U.S. PATENT NO. 7,916,630**  
**UNDER 35 U.S.C. § 101**

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## I. INTRODUCTION

The claims of United States Patent No. 7,916,630 (“the ’630 Patent”) are not impermissibly abstract because they are directed to a patent-eligible improvement in network functionality. “To be a patent-eligible improvement to computer functionality, [the Federal Circuit] ha[s] required the claims to be directed to an improvement in the functionality of the computer or network platform itself.” *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1364 (Fed. Cir. 2020). The ’630 Patent improves the functionality of computer networks by solving the problem of determining the status of the components in a distributed system without high message volume (’630 Patent at 2:4-9) or redundant central coordination (*id.* at 2:25-28). Cisco does not refute this essential point, and Cisco’s motion to dismiss must be denied.

## II. The Asserted Claims Are Patent Eligible Under *Alice* Step One.

The Federal Circuit has repeatedly held that claims directed to an improvement in computer or network functionality are patent eligible. *See, e.g., SRI Int’l, Inc. v. Cisco Sys. Inc.*, 930 F.3d 1295 (Fed. Cir. 2019); *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143 (Fed. Cir. 2019); *Finjan, Inc. v. Blue Coat System, Inc.*, 879 F.3d 1299 (Fed. Cir. 2018); *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999 (Fed. Cir. 2018); *Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d 1343 (Fed. Cir. 2018); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253 (Fed. Cir. 2017); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016). Here, the ’630 Patent claims are directed to a tangible improvement to computer network functionality through the use of a logical ring monitoring system. Dkt. No. 49 (“Opp.”) at 6-10.

Cisco does not rebut this proposition, but instead mischaracterizes the ’630 Patent claims as implementing abstract ideas with elements known in the prior art. Dkt. No. 56 (“Reply”) at 1. But, as set forth in Lionra’s Opposition, the “monitoring” and “informing” aspects of the ’630 Patent claims were a key distinction over the prior art. Opp. at 9. “[T]he relevant question for

purposes of step one is what is ‘the focus of the claimed advance over the prior art.’” *Uniloc USA, Inc. v. ADP, LLC*, 772 F. App’x 890, 898 (Fed. Cir. 2019) (citation omitted). And, here, the ’630 Patent even quantifies its improvement over the prior art. See Opp. at 8-9; *Koninklijke KPN N.V.*, 942 F.3d at 1145 (“these claims are directed to an improved check data generating device that enables a data transmission error detection system to detect a specific type of error that prior art systems could not.”).

Cisco improperly overgeneralizes the ’630 Patent claims as merely directed to a “logical ring structure” without accounting for the improvements in the “monitoring” and “informing” aspects of the invention. The Federal Circuit has “reiterated the Supreme Court’s caution against ‘overgeneralizing claims’ in the § 101 analysis, explaining that characterizing the claims at ‘a high level of abstraction’ that is ‘untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule.’” *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1293 (Fed. Cir. 2020) (citations omitted). Further, the different aspects of the claimed invention need to be read *as a whole* and the interaction between claimed components needs to be considered in light of the teachings of the specification under the *Alice* Step One inquiry. See *Enfish*, 822 F.3d at 1335 (“the ‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether ‘their character as a whole is directed to excluded subject matter.’”) (citation omitted). To that end, Cisco’s attempt to reduce the ’630 Patent claims to a simple “logical ring structure” without consideration of the other aspects of the invention—such as the “monitoring” and “informing aspects”—should be rejected. See *C R Bard Inc. v. AngioDynamics, Inc.*, 979 F.3d 1372, 1384 (Fed. Cir. 2020) (“When each claim is read as a whole, the focus of the claimed

advance is not solely on the content of the information conveyed, but also on the means by which that information is conveyed.”).<sup>1</sup>

It is equally inaccurate to denigrate the claim limitations as directed to insignificant extra-solution activity. Reply at 3-4. The ’630 Patent claims are directed to improving the functionality of a computer network and the further recitation of specific techniques by which this is achieved, such as by using an “Inform All” method and “Acknowledgement” messages, are specific to communications networks. ’630 Patent at 3:62-4:8, 5:43-53. These additional concepts that build upon the ’630 Patent inventions are not insignificant extra-solution activity or abstract concepts.

Cisco also fails to rebut the relevance of the ’630 Patent claims’ connection to a real-world (Hi-Path IP) system. Reply at 2. Cisco’s reliance on *In re TLI Commc’ns LLC Patent Litigation* is misplaced, as those patents did not even reference a specific real-world system. 823 F.3d 607, 611 (Fed. Cir. 2016). In contrast, the patent-eligible claims in *Uniloc USA, Inc. v. LG Elecs. USA, Inc.* were described with particular relevance to a Bluetooth system. 957 F.3d 1303, 1305 n.1 (Fed. Cir. 2020).

Further, Cisco all but admits that its “buddy system” analogy is imperfect. Reply at 2, 4. The fact that the claimed invention has “differences in the implementation” from Cisco’s analogy only underscores why the ’630 Patent claims are not directed to an abstract idea. Reply at 2, 4.

Finally, the cases cited by Cisco are all inapposite because the ’630 Patent claims are not directed to abstract ideas. See Reply at 1. For example, in *Customedia Techs., LLC v. Dish Network Corp.*, the abstract idea was using a computer to deliver targeted advertising to a user and

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<sup>1</sup> The claims at issue here are readily distinguished from those in *buySAFE* because the ’630 Patent claims do not entail mere transmission of information by generic computers. *C.f.*, *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014). Here, the claims specify not only the type of information that is transmitted over a network, but also specify the organization and operation of the relevant components performing the communications.

did not “improve the functionality of the computer itself.” 951 F.3d 1359, 1362-63 (Fed. Cir. 2020). Similarly, in *ChargePoint, Inc. v. SemaConnect, Inc.*, the patents simply “add[ed] networking capabilities to existing charging stations to facilitate various business interactions” and was also not aimed at improving the functionality of the computing system. 920 F.3d 759, 771 (Fed. Cir. 2019).

Cisco’s citation to 9th Circuit district court cases is equally unavailing. Reply at 2-3. Both *Appistry, Inc. v. Amazon.com, Inc.*, No. C15-311, 2015 WL 4210890 (W.D. Wash. July 9, 2015) and *Coho Licensing LLC v. Glam Media, Inc.*, No. C 14-01576, 2017 WL 6210882 (N.D. Cal. Jan. 23, 2017) are directed to distributed processing, firstly in a method akin to the military’s command and control system and, secondly, using the basic concept of divide-and-conquer. The claims at issue in these cases were not directed to improving the performance of a computer or a network—those cases involved patents directed to improving the performance of generically networked computers without specificity as to how or to what degree performance is improved.

At bottom, the ’630 Patent claims are directed to specific improvements in network functionality that are not abstract. As such, they are patent-eligible under *Alice* Step One.

### **III. The ’630 Patent Claims Recite Inventive Combinations Under *Alice* Step Two.**

Because the Asserted Claims are not directed to an abstract idea, the Court need not consider *Alice* Step Two. In the event that the Court reaches Step Two, Cisco fails to meet its burden to prove by clear and convincing evidence that the combination of elements in the claims is well-understood, routine and conventional. As detailed in Lionra’s Opposition, the claimed features regarding (1) monitoring of respective predecessor or successor neighboring components and (2) informing all the other components in the system about the condition of the respective neighboring component are key aspects of the invention and far from conventional. Opp. at 9-10. The ’630 Patent’s claimed logical ring monitoring system is not conventional in the specific



context of computing networks. *See, e.g., Coop. Ent., Inc. v. Kollektive Tech., Inc.*, 50 F.4th 127, 135 (Fed. Cir. 2022) (“[U]seful improvements to computer networks are patentable regardless of whether the network is comprised of standard computing equipment.”).

At most, Cisco cites evidence from the patent specification suggesting that certain components—in isolation and divorced from their use in the claims—were conventional. Reply at 5. But Cisco fails to provide any evidence, much less clear and convincing, that the claimed advances over the prior art discussed above for each patent were merely conventional. At a minimum, Lionra has set forth factual disputes related to whether these advances were merely conventional. Therefore, Cisco’s motion must be denied.

#### **IV. Amendment Would Not Be Futile, If Necessary.**

If this Court finds that Lionra’s complaint does not provide sufficient factual allegations to support the factual inquiry for *Alice* Step Two, Lionra should be granted leave to amend the complaint. *See* Fed. R. Civ. P. 15(a); *see also Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1126 (Fed. Cir. 2018). The cases cited by Cisco do not suggest otherwise. In *Marucci Sports, L.L.C. v. Nat’l Collegiate Athletic Ass’n*, the plaintiff had three opportunities to state a claim upon which leave could be granted before leave to amend was denied. 751 F.3d 368, 378-79 (5th Cir. 2014). *Secured Mail Sols. LLC v Universal Wilde, Inc.* is inapposite because it does not address leave to amend, claims that are directed to an improvement in computer functionality, or claims that are specific and recite technical detail. 873 F.3d 905, 910-12 (Fed. Cir. 2017). Finally, in *Simio LLC v. FlexSim Software Prods., Inc.*, the purported improvements were conclusory and related to the speed of a user instead of computer or network functionality. 983 F.3d 1353, 1365 (Fed. Cir. 2020). The Court should freely grant leave to amend.

#### **V. CONCLUSION**

For the reasons stated above, Cisco’s motion should be denied in its entirety.

Dated: December 8, 2022

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I certify that this document is being served upon counsel of record for Defendant on December 8, 2022 via electronic service.

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